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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/452,285	11/30/1999	BRIAN LO BUE	CISCO-1515	1104

7590 10/06/2003

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EXAMINER
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DINH, KHANH Q

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 10/06/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/452,285

Applicant(s)

BUE ET AL.

Examiner

Khanh Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,9-24,26,30-32,52 and 63-84 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1-4,9-24,26,30-32,52 and 63-84 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This is in response to the Request for Continued Examination filed on 9/8/2003 (paper 12) and the Amendment filed on 9/8/2003 (paper #13). Claims 53-62 are canceled. Claims 1-4, 9-24, 26, 30-32, 52 and new claims 63-84 are presented for examination.

**Claim Rejections - 35 USC § 103**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 9-24, 26, 30-32, 52 and 63-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al US pat. No.6,185,598 in view of Arnon et al US pat. No.6,242,999.

As to claim 1, Farber a local server for enabling a data communications network to recover from a failure of said local server, the data communications network including a backup server and a network access server (NAS) coupling a call placed from a call-in user to the data communication network, the NAS having a memory, said local server comprising:

An information requester responsive to the local server failure, the information packet receiving from the associated memory associated with the NAS an information packet associated with an ongoing call, wherein the information packet containing call information for maintaining connection of the ongoing call (i.e., in response to clients' request from the origin server and selecting the best Repeater Server to handle client's requests, see abstract, fig. 1, col.4 line 64 to col.6 line 65 and col.11 line 1 to col.12 line 58).

a parser for reconstructing the call information data from said information data from the said information data packet, whereby the server maintains the ongoing call to the communications network (see col.9 line 1 to col.10 line 59 and col.11 line 4 to col.12 line 67). Farber does not specifically disclose an information packet requester receiver responsive to the local failure. However, Arnon discloses a backup server system (14 fig. 1) for an information packet requester receiver responsive to the local failure (i.e., initiating the backup operations to restore information or in the event of failure of the mass storage system, see abstract, fig.1, col.1 lines 15-41, col.2 line 38 to col.4 line 28 and col.7 line 8 to col.8 line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a backup server to restore information in the computer system of Farber because it would have been transferred data information efficiently to be restored from a backup subsystem in which information is back up to a mass storage subsystem during a restored operation.

As to claims 2 and 3, Farber discloses the call information including server attribute having an attribute/value pair that can be parsed into a plurality of separate data entries and a plurality of

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aggregated data elements from a call attribute table (see col.9 line 1 to col.10 line 59 and col.15 line 5 to col.12 line 51).

As to claim 4, Farber discloses plurality of aggregated data elements of said information packet are separated by said parser for reconstructing said plurality of SSA information data from said information packet (see col.11 line 5 to col.12 line 54).

As to claims 9, Farber discloses a local server for enabling a data communications network, the data communications network including a backup server and a network access server (NAS) coupling a call placed from a call-in user to the data communication network, the NAS having a memory, said local server comprising:

an encoder for generating an information packet associated with ongoing call (using Client 106 fig.1 as a processor requesting resources from the origin server 102 fig.1 on behalf of an end user, see col.4 lines 14-63), information packet containing call information for maintaining connection of the ongoing call (i.e., in response to clients' request from the origin server and selecting the best Repeater Server to handle client's requests, see abstract, fig. 1, col.4 line 64 to col.6 line 65 and col.11 line 1 to col.12 line 58).

a sender for transmitting the information packet from the encoder to the memory, the information packet being stored in the memory to be available to the server (see col.7 line 3 to col.8 line 49 and col.13 lines 16-67).

Farber does not specifically disclose an information packet requester receiver responsive to the local server failure. However, Arnon discloses a backup server system (14 fig. 1) for an information packet requester receiver responsive to the local server failure (i.e., initiating the

backup operations to restore information or in the event of failure of the mass storage system, see abstract, fig.1, col.1 lines 15-41, col.2 line 38 to col.4 line 28 and col.7 line 8 to col.8 line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a backup server to restore information in the computer system of Farber because it would have been transferred data information efficiently to be restored from a backup subsystem in which information is back up to a mass storage subsystem during a restored operation.

Claims 10-12 are rejected for the same reasons set forth in claims 2-4 respectively.

As to claims 13 and 17, Farber discloses a local server for maintaining a call-in user to a data communications network, the network including a backup server and a network access server (NAS) coupling the call to the network, the NAS having a memory associated with the NAS, said local server comprising:

A memory (12's fig.1) associated with the NAS.

an encoder for generating an information packet associated with the call, information packet containing call information for maintaining connection of the call (i.e., in response to clients' request from the origin server, see abstract, fig. 1, col.4 line 14 to col.6 line 65).

and a sender for transmitting the information packet from the encoder to the memory, the information packet being stored in the memory to be available to the backup server if the local server fails (see col.7 line 3 to col.8 line 49).

a call coupler associated with the NAS for coupling the call to the local server if the local server does not fail, and for coupling to the backup server if the local server fails (see col.8 line 50 to col.9 line 65).

and wherein said second server including: an information packet requester (client's requests) for requesting the information packet from the memory in response to the call received from the NAS, if the call information is not available to the second server and a parser for reconstructing the information packet and serve the call without disconnecting the user from the network (using to reflector 108 of fig.1 to take control of the original server in the case the server fails, see col.9 line 44 to col.10 line 58).

Farber does not specifically disclose a failure detector. However, Arnon discloses a backup server system (14 fig. 1) for an information packet requester receiver responsive to the local failure (i.e., initiating the backup operations to restore information or in the event of failure of the mass storage system, see abstract, fig.1, col.1 lines 15-41, col.2 line 38 to col.4 line 28 and col.7 line 8 to col.8 line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a failure detector to restore information in the computer system of Farber because it would have been transferred data information efficiently to be restored from a backup subsystem in which information is back up to a mass storage subsystem during a restored operation.

Claims 14-16 are rejected for the same reasons set forth in claims 2-4 respectively.

Claims 18 and 19 are rejected for the same reasons set forth in claims 2 and 3 respectively.

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Claim 20 is rejected for the same reasons set forth in claim 13. As to the added limitations, Farber discloses a backup server (108 fig.1) connected to the network to service the call (see col.5 line 3 to col.6 line 36).

Claims 21-23 are rejected for the same reasons set forth in claims 2-4 respectively.

As to claim 24, Farber discloses that the server is a resource pool manager server (RPMS) (i.e., using the reflector 108 fig.1 to processing requests from servers, see fig.1, col.7 line 27 to col.8 line 53 and col.10 lines 13-67).

Claim 26 is rejected for the same reasons set forth in claim 2.

As to claim 30, Farber discloses a server backup system for maintaining an ongoing call placed by a call-in user to a network, the network and a failure detector connected to the network for determining whether said server access failure has occurred, said memory and said failure detector both associated with a network access server (NAS) that is connected to said network, said system comprising:

a first server (102 fig.1) connected to the network for servicing the call (request from client, see col.4 lines 14-48), a second server (108 fig.1) connected to the network for servicing the call (using call-in module, see col.4 lines 38-63) if the first server fails, a network access server (NAS) for coupling the call from the user (client 106 fig.1) to said first server, and coupling the call to said second server if the first server fails (see abstract, fig.1, col.4 line 64 to col.6 line 35), said NAS including a memory associated therewith, wherein said first server including:

an encoder (104b fig.1) for generating an information packet, the information packet containing call information for maintaining connection of the call to the first server; and a sender



(104m fig.1) for transmitting the information packet from said encoder to the memory associated with the NAS, the memory storing the information packet (see col.5 line 3 to col.6 line 65 and col.7 lines 25-55).

and wherein said second server including: an information packet requester (client's requests) for requesting the information packet from the memory in response to the call received from the NAS, if the call information is not available to the second server; and a parser for reconstructing the call information from said information packet (using to reflector 108 of fig.1 to take control of the original server in the case the server fails, see col.9 line 1 to col.10 line 58). Farber does not specifically disclose a failure detector. However, Arnon discloses a backup server system (14 fig. 1) for an information packet requester receiver responsive to the local failure (i.e., initiating the backup operations to restore information or in the event of failure of the mass storage system, see abstract, fig.1, col.1 lines 15-41, col.2 line 38 to col.4 line 28 and col.7 line 8 to col.8 line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a failure detector to restore information in the computer system of Farber because it would have been transferred data information efficiently to be restored from a backup subsystem in which information is back up to a mass storage subsystem during a restored operation.

As to claim 31, Arnon discloses a data caller responsive to the failure detector for detecting the failure of the second server (see col.3 line 31 to col.5 line 65 and col.6 line 37 to col.7 line 56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Arnon's teachings into the computer system of Farber because it would have been

transferred data information efficiently to be restored from a backup subsystem in which information is back up to a mass storage subsystem during a restored operation.

As to claim 32, Farber discloses that the server is a resource pool manager server (RPMS) and a backup EPMS server (i.e., using the reflector 108 fig.1 to processing requests from servers, see fig.1, col.7 line 27 to col.8 line 53 and col.10 lines 13-67).

As to claim 52, Farber discloses said sender transmits the information packet in response to a request from the backup server.

As to claims 53 and 62, Farber discloses a method for maintaining an ongoing call placed by a call-in user to a network, the network including a first server for servicing the call, a network access server (NAS) for coupling the call from the user to the server, a memory associated with the NAS, and a second server capable of servicing the call, comprising:

generating, at the first server (102 fig.1), an information packet (request) associated with the call, the information packet containing call information for maintaining connection of the call to the local server fails (see abstract, fig.1, col.4 line 64 to col.6 line 35); transmitting the information packet from the first server to the memory associated with the NAS, the memory storing the information packet; coupling the call placed by the user from the NAS to the second server if the first server fails (see col.5 line 3 to col.6 line 65 and col.7 lines 25-55).

transmitting the information packet from the memory associated with the NAS to the second server (108 fig.1) and reconstructing the call information from the information packet at the second server (using to reflector 108 of fig.1 to take control of the original server in the case the server fails, see col.9 line 1 to col.10 line 58).

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Farber does not specifically disclose a servicing the call without disconnecting the user from the network. However, Arnon discloses a backup server system (14 fig. 1) for an information packet requester receiver responsive to the local failure (i.e., initiating the backup operations to restore information or in the event of failure of the mass storage system, see abstract, fig.1, col.1 lines 15-41, col.2 line 38 to col.4 line 28 and col.7 line 8 to col.8 line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Arnon's teachings to process data information in the computer system of Farber because it would have been transferred data information efficiently to be restored from a backup subsystem in which information is back up to a mass storage subsystem during a restored operation.

Claims 63 and 64 are rejected for the same reasons set forth in claims 13 and 2 respectively.

As to claims 65, Farber further discloses petitioning to the NAS for the information packet after the NAS requests the call information and sending the call information to the NAS after completing reconstructing (see col.10 line 14 to col.11 line 53 and col.23 line 36 to col.24 line 67).

Claim 66 is rejected for the same reasons set forth in claim 9.

As to claims 67 and 75, Farber discloses encoding a plurality of aggregated data elements from a call attribute table representing the SSA data and delimiting information packet into an attribute

data string and a value data string (see fig.6, col.10 line 14 to col.11 line 53, col.13 line 6 to col.14 line 65 and col.23 line 36 to col.24 line 67).

Claims 68-74 are rejected for the same reasons set forth in claims 13, 17, 2, 1, 2, 65 and 9 respectively.

Claims 76-79 are rejected for the same reasons set forth in claims 17, 2, 1 and 2 respectively.

Claims 80-84 are rejected for the same reasons set forth in claims 65, 9, 2, 17 and 2 respectively.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-4, 9-24, 26, 30-32, 52 and 63-84 have been considered but are moot in view of the new ground(s) of rejection.

#### **Conclusion**

5. Claims 1-4, 9-24, 26, 30-32, 52 and 63-84 are rejected.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (703) 308-8528. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam Hosain, can be reached on (703) 308-6662. The fax phone numbers for this group are:

After Final: (703) 746-7238

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Official: (703) 872-9306.

Non-Official/ Draft: (703) 746-7240

A shortened statutory period for reply is set to expire THREE months from the mailing date of this communication. Failure to response within the period for response will cause the application to become abandoned (35 U.S. C. Sect. 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(A).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305 -9600.

Khanh Dinh  
Patent Examiner  
Art Unit 2155  
9/27/2003

  
**HOSAIN ALAM**  
**SUPERVISORY PATENT EXAMINER**